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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/626,900	07/27/2000	Christian Buchler	RCA 90 , 264	2547

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Joseph S Tripoli
Patent Operations
Thomson Multimedia Licensing Inc CN 5312
Princeton, NJ 08543-0028

EXAMINER	
CHU, KIM KWOK	
ART UNIT	**PAPER NUMBER**
2653	15

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/626,900	BUCHLER ET AL.	
	Examiner	Art Unit	
	Kim-Kwok CHU	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 10/2/03 (paper 14)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7 and 15* is/are rejected.

7)☒ Claim(s) *2-6,8-14 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7/27/02 (paper 6)* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Remarks

1. Applicant's Remarks filed on October 2, 2003 have been fully considered.

(a) In the Remarks, on page 7, lines 17 and 18, Applicant states that the prior art of Toda does not anticipate claim 1 because Toda's element 402 "does not detects a sequence of the laterally offset header markings". Accordingly, Toda discloses a sequence of laterally offset header markings H in Fig. 4A. The header markings are detected by optical sensors 103 and 104 (Fig. 2). In addition, in Fig. 5, Toda discloses header markings detecting means 401 which detects a laterally offset header sequence. Furthermore, Toda teaches track pull-in enabling signal detecting circuit 402 which detects the proper location of the laterally offset header markings so that it can be removed; and

(b) Applicant's header area having a sequence of laterally offset header markings is a general feature. Besides the prior art of Toda illustrates this in Fig. 4A, other references such as Belser (U.S. Patent 5,615,205) teaches such feature in Fig. 8.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless -*
> *(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

3. Claims 1 and 7 are rejected under 35 U.S.C. § 102(e) as being anticipated by Toda (U.S. Patent 6,377,522).

Toda teaches a land/groove detecting apparatus having all of the elements and means as recited in claims 1 and 7. For example, Toda teaches the following:

(a) as in claim 1, means 101 for reading or writing data markings of an optical recording medium 100 having data markings arranged along a track (Figs. 1 and 17A);

(b) as in claim 1, means 101 for reading or writing header markings arranged laterally offset with respect to the center of the track (Figs. 1 and 4A);

(c) as in claim 1, an intermediate track being arranged between two adjacent tracks (Fig. 3A);

(d) as in claim 1, a header identification unit 115 (Fig. 5);

(e) as in claim 1, a header sequence detector 401 and 402 for detecting a sequence of the laterally offset header markings (Figs. 4A and 5; header sequence H is laterally offset; column 17, lines 25-67; header sequence is detected so that the optical beams move from the data area to the header area; header sequence is again detected so that the arithmetic unit 413 recognizes it);

(f) as in claim 1, a track crossing detector 403 (Fig. 5);

(g) as in claim 1, an intermediate track detector 404 for generating an intermediate track signal 117 (Fig. 5);

(h) as in claim 1, the intermediate track detector 404 is connected to outputs of the header identification unit 401, of the track crossing detector 403 and of the header sequence detector 402 (Fig. 5); and

(i) as in claim 7, the header identification unit 115 evaluates a summation signal 114 of the detector signals (Figs. 1 and 5).

4. Claim 15 is rejected under 35 U.S.C. § 102(e) as being anticipated by Toda (U.S. Patent 6,377,522).

Toda teaches a land/groove detecting method having all of the steps as recited in claim 15. For example, Toda teaches the following:

(a) as in claim 15, reading or writing data markings of an optical recording medium 100 (Fig. 1);

(b) as in claim 15, the data markings arranged along a track and header areas containing one or more header marking (Fig. 4A);

(c) as in claim 15, the header markings H arranged with laterally offset with respect to the center of the track (Fig. 4A);

(d) as in claim 15, an intermediate track being arranged between two adjacent tracks (Fig. 4A);

(e) as in claim 15, checking a signal 111, 114 derived from detector elements of an apparatus 101 for the presence of signal components which indicate the lateral offset of the header markings (Figs. 1 and 5);

(e) as in claim 15, if the signal components are present, determining the succession information about the signal components originating from differently arranged header markings within the header areas (Fig. 5; a sequence of headers are detected);

(f) as in claim 15, generating a signal 406 corresponding to a track crossing frequency (Fig. 5); and

(g) as in claim 15, generating the intermediate track signal 416 from the succession information and the signal corresponding to the track crossing frequency (Fig. 5).

Allowable Subject Matter

5. Claims 2-6, 8-14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 2, the prior art of record fails to teach or fairly suggest a header identification unit, which comprises a high-frequency path, low-frequency path and a signal detector, and has a track error signal applied to it.

As in claim 3, the prior art of record fails to teach or fairly suggest a header sequence detector, which comprises envelope detectors, to which a track error signal is fed, and has outputs connected to a comparator.

As in claim 4, the prior art of record fails to teach or fairly suggest a header sequence detector having a phase

detector, which is fed with signals derived from detector elements of a multi-zone detector of the apparatus.

As in claim 5, the prior art of record fails to teach or fairly suggest a track crossing detector which has a track error signal applied to it, and which comprises one of a phase shifter and a peak value detector.

As in claim 8, the prior art of record fails to teach or fairly suggest a validity detector for outputting a validity signal, and a track crossing frequency detector for supplying a track cross signal to the validity detector.

As in claim 16, the prior art of record fails to teach or fairly suggest a step of detecting the track crossing frequency, and, if a limit value is undershot, generating an invalidity signal, which is cancelled only when signal components which are typical of header areas are present once again.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Belser (5,615,205) is pertinent because Belser teaches a laterally offset header markings.

8. Any response to this action should be mailed to: Commissioner of Patents and Trademarks Washington, D.C. 20231 Or faxed to:

(703) 872-9306 (for formal communications intended for entry. Or:

(703) 746-6909, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim CHU whose telephone number is (703) 305-3032 between 9:30 am to 6:00 pm, Monday to Friday.

Kim-Kwok CHU
Examiner AU2653
January 6, 2004

(703) 305-3032

William Korzuch

WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600